Application No.: 10/522,523

Attorney Docket No.: Q85512

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## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

## LISTING OF CLAIMS:

- 1. (canceled).
- 2. (canceled).
- 3. (previously presented): Diamine compounds represented by the general formula I:

$$H_2N$$
 $A^1$ 
 $A^2$ 
 $NH_2$ 

wherein  $A^1$  and  $A^2$  each independently represent a mesogen group represented by general formula II:

$$\cdots S^{\frac{1}{n}} C^{\frac{1}{n}} Z^{\frac{1}{n}} C^{\frac{2}{n}} Z^{\frac{2}{n}} C^{\frac{3}{n}} D$$

wherein

c1 to c3 each independently represent an aromatic or an alicyclic group, which is unsubstituted or mono- or poly-substituted by a cyano group or by halogen atoms, or by a cyclic, straight-chain or branched alkyl residue which is unsubstituted,

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mono- or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, or by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more non-adjacent -CH<sub>2</sub>- groups is independently replaced by a group B;

D

represents a hydrogen atom, a halogen atom, a cyano group, or a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 1 to 24 carbon atoms, or a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 1 to 24 carbon atoms, wherein one or more non-adjacent -CH2-groups is independently replaced by a group B, or represents a organic group having a steroid skeleton;

 $S^1$ 

represents a single bond or a spacer unit such a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by a cyano group or by halogen atoms, having 1 to 24 carbon atoms, or a spacer unit which is straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by a cyano group or by halogen atoms, having 1 to 24 carbon atoms, wherein one or more non-adjacent -CH<sub>2</sub>- groups is independently replaced by a group B;

Z1, Z2

each independently of the other represent a single bond or a spacer unit which is straight-chain or branched alkylene group which is unsubstituted, mono or polysubstituted by a cyano group or by halogen atoms, having 1 to 8 carbon

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atoms or a spacer unit such a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by a cyano group or by halogen atoms, having 1 to 8 carbon atoms, wherein one or more non-adjacent -CH2- groups is independently replaced by a group B;

n1 to n3 are each independently 0 or 1; and

> represents a group selected from -O-, -CO-, -CO-O-, -O-CO-, -NR1-, -NR1-CO-, В -CO-NR<sup>1</sup>-, -NR<sup>1</sup>-CO-O-, -O-CO-NR<sup>1</sup>-, -NR<sup>1</sup>-CO-NR<sup>1</sup>-, -CH=CH-, -C $\equiv$ C-, -O-CO-O- and -Si(CH<sub>3</sub>)<sub>2</sub>-O-Si(CH<sub>3</sub>)<sub>2</sub>- and wherein R<sup>1</sup> represents a hydrogen atom or a straight chain or branched hydrocarbon radical having from 1 to 6 carbon atoms,

with the proviso that if n1 = n2 = n3 = 0 then D is a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 5 to 24 carbon atoms or a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 5 to 24 carbon atoms, wherein one or more non-adjacent -CH<sub>2</sub>- groups is independently replaced by a group B, or represents a organic group having a steroid skeleton.

(previously presented): Diamine compounds according to claim 3, wherein C1 to 4. C<sup>3</sup> are selected from pyrimidine-2,5-diyl, pyridine-2,5-diyl, 1,4- or 2,6-naphthylene, decahydronaphthalin-2,6-diyl, 1,2,3,4-tetrahydronaphthalin-2,6-diyl, cyclohexane-1,4-diyl and 1,4-phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine having from 1 to

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12 carbon atoms in which optionally one or more non-adjacent -CH<sub>2</sub>- groups are replaced by -O-, -CO-, -CO-, -CO-, -CH=CH- and -C≡C-.

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- 5. (previously presented): Diamine compounds according to claim 3, wherein C<sup>1</sup> to C<sup>3</sup> are selected from cyclohexane-1,4-diyl and 1,4-phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue having 1 to 12 carbon atoms in which optionally one or more non-adjacent -CH<sub>2</sub>- groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C=C-.
- 6. (previously presented): Diamine compounds according to claim 3, wherein D is a hydrogen atom, a fluoro atom, a chloro atom, a cyano group, a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or polysubstituted by fluorine, chlorine, having 1 to 18 carbon atoms or a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or polysubstituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more non-adjacent-CH<sub>2</sub>- groups is independently replaced by -O-, -CO-, -CO-O-, -O-CO-, -NR<sup>1</sup>-CO-, -CO-NR<sup>1</sup>-, -NR<sup>1</sup>-CO-O-, -O-CO-NR<sup>1</sup>-, -CH=CH-, -C=C- and -O-CO-O-, wherein R<sup>1</sup> represents a hydrogen atom or a straight chain or branched hydrocarbon radical having from 1 to 6 carbon atoms, or represents an organic group having a steroid skeleton.
- 7. (previously presented): Diamine compounds according to claim 3, wherein D is a hydrogen atom, a fluoro atom, a chloro atom, a cyano group, a straight-chain or branched alkyl residue, having 1 to 12 carbon atoms or a straight-chain or branched alkyl residue, having 1 to 12 carbon atoms, wherein one or more non-adjacent -CH<sub>2</sub>- groups is independently replaced by -O-, -CO-, -CO-O-, -CH=CH-, -C=C- and -O-CO-O-.

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- 8. (previously presented): Diamine compounds according to claim 3, wherein S¹ is selected from a single covalent bond, -CO-O-, -CO-NR¹-, -CO-, a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine and cyano, having 1 to 24 carbon atoms, and a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine and cyano, having 1 to 24 carbon atoms, wherein one or more non-adjacent -CH2- groups is independently replaced by a group B, wherein R¹ represents a hydrogen atom or a straight chain or branched hydrocarbon radical having from 1 to 6 carbon atoms.
- 9. (previously presented): Diamine compounds according to claim 3, wherein S¹ is selected from a single covalent bond, -CO-O-, -CO-, -(CH2)r-, -(CH2)r-O-, -(CH2)r-CO-, -(CH2)r-CO-O-, -(CH2)r-O-CO-, -(CH2)r-CO-NR¹-, -(CH2)r-NR¹-CO-, -(CH2)r-NR¹-, -CO-O-(CH2)r-, -CO-NR¹-(CH2)r-, -CO-O-(CH2)r-, -CO-NR¹-(CH2)r-O-, -CO-NR¹-(CH2)r-O-(CH2)r-O-(CH2)r-O-(CH2)r-CO-O-(CH2)r-O-(CH
- 10. (previously presented): Diamine compounds according to claim 3, wherein S<sup>1</sup> is selected from a single covalent bond,  $-(CH_2)_{r}$ ,  $-(CH_2)_{r}$ -O-,  $-(CH_2)_{r}$ -CO-O-,  $-(CH_2)_{r}$ -CO-NH-,  $-(CH_2)_{r}$ -NH-CO-,  $-(CH_2)_{r}$ -,  $-(CO-O-(CH_2)_{r}$ -)

represent an integer from 1 to 12 and  $r + s \le 15$ .

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-CO-NH-(CH<sub>2</sub>)<sub>r</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-NH-CO-(CH<sub>2</sub>)<sub>s</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-NH-CO-O-(CH<sub>2</sub>)<sub>s</sub>-,  $-(CH_2)_r - O - (CH_2)_s - O -, -(CH_2)_r - NH - CO - (CH_2)_r - N$ -CO-O-(CH<sub>2</sub>)<sub>r</sub>-O-(CH<sub>2</sub>)<sub>s</sub>-O-, and -CO-(CH<sub>2</sub>)<sub>r</sub>-NH-CO-(CH<sub>2</sub>)<sub>s</sub>-O-, wherein r and s each

11. (previously presented): Diamine compounds according to claim 3, wherein S1

include 1,2-ethylene, 1,3-propylene, 1,4-butylene, 1,5-pentylene, 1,6-hexylene, 1,7-heptylene,

1,8-octylene, 1,9-nonylene, 1,10-decylene, 1,11-undecylene, 1,12-dodecylene,

3-methyl-1,4-butylene, 2-(methylenoxy)ethylene, 3-(methylenoxy)propylene,

4-(methylenoxy)butylene, 5-(methylenoxy)pentylene, 6-(methylenoxy)hexylene,

7-(methylenoxy)heptylene, 8-(methylenoxy)octylene, 9-(methylenoxy)nonylene,

10-(methylenoxy)decylene, 11-(methylenoxy)undecylene, 12-(methylenoxy)dodecylene,

2-(carbonyloxy)ethylene, 3-(carbonyloxy)propylene, 4-(carbonyloxy)butylene,

5-(carbonyloxy)pentylene, 6-(carbonyloxy)hexylene, 7-(carbonyloxy)heptylene,

8-(carbonyloxy)octylene, 9-(carbonyloxy)nonylene, 10-(carbonyloxy)decylene,

11-(carbonyloxy)undecylene, 12-(carbonyloxy)dodecylene, 2-(carbonylamino)ethylene,

3-(carbonylamino)propylene, 4-(carbonylamino)butylene, 5-(carbonylamino)pentylene,

6-(carbonylamino)hexylene, 7-(carbonylamino)heptylene, 8-(carbonylamino)octylene,

9-(carbonylamino)nonylene, 10-(carbonylamino)decylene, 11-(carbonylamino)undecylene,

12-(carbonylamino)dodecylene, 3-propyleneoxy, 3-propyleneoxycarbonyl, 2-ethylenoyloxy,

4-butyleneoxy, 4-butyleneoxycarbonyl, 3-propylenoyloxy, 5-pentyleneoxy,

5-pentyleneoxycarbonyl, 4-butylenoyloxy, 6-hexyleneoxy, 6-hexyleneoxycarbonyl,

5-pentylenoyloxy, 7-heptyleneoxy, 7-heptyleneoxycarbonyl, 6-hexylenoyloxy, 8-octyleneoxy,

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8-octyleneoxycarbonyl, 7-heptylenoyloxy, 9-nonyleneoxy, 9-nonyleneoxycarbonyl,

8-octylenoyloxy, 10-decyleneoxy, 10-decyleneoxycarbonyl, 9-nonylenoyloxy,

11-undecyleneoxy, 11-undecyleneoxycarbonyl, 10-decylenoyloxy, 12-dodecyleneoxy,

12-dodecyleneoxycarbonyl, 11-undecylenoyloxy, 3-propyleneaminocarbonyl,

4-butyleneaminocarbonyl, 5-pentyleneaminocarbonyl, 6-hexyleneaminocarbonyl,

7-heptyleneaminocarbonyl, 8-octyleneaminocarbonyl, 9-nonyleneaminocarbonyl,

10-decyleneaminocarbonyl, 11-undecyleneaminocarbonyl, 12-dodecyleneaminocarbonyl,

2-ethylenecarbonylamino, 3-propylenecarbonylamino, 4-butylenecarbonylamino,

5-pentylenecarbonylamino, 6-hexylenecarbonylamino, 7-heptylenecarbonylamino,

8-octylenecarbonylamino, 9-nonylenecarbonylamino, 10-decylenecarbonylamino,

11-undecylenecarbonylamino, 2-(methylenoxy)ethanoyloxy, 3-(methylenoxy)propyloxy,

3-(methylenoxy)propyloxycarbonyl, 4-(methylenoxy)butyloxy,

4-(methylenoxy)butyloxycarbonyl, 3-(methylenoxy)propanoyloxy, 5-(methylenoxy)pentyloxy,

5-(methylenoxy)pentyloxycarbonyl, 4-(methylenoxy)butanoyloxy, 6-(methylenoxy)hexyloxy,

6-(methylenoxy)hexyloxycarbonyl, 5-(methylenoxy)pentanoyloxy, 7-(methylenoxy)heptyloxy,

7-(methylenoxy)heptyloxycarbonyl, 6-(methylenoxy)hexanoyloxy, 8-(methylenoxy)octyloxy,

8-(methylenoxy)octyloxycarbonyl, 7-(methylenoxy)heptanoyloxy, 9-(methylenoxy)nonyloxy,

9-(methylenoxy)nonyloxycarbonyl, 8-(methylenoxy)octanoyloxy, 10-(methylenoxy)decyloxy,

10-(methylenoxy)decyloxycarbonyl, 9-(methylenoxy)nonanoyloxy,

11-(methylenoxy)undecyloxy, 11-(methylenoxy)undecyloxycarbonyl,

10-(methylenoxy)decanoyloxy, 12-(methylenoxy)dodecyloxy,

12-(methylenoxy)dodecyloxycarbonyl, 11-(methylenoxy)undecanoyloxy,

3-(methylenoxy)propylaminocarbonyl, 4-(methylenoxy)butylaminocarbonyl,

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- 5-(methylenoxy)pentylaminocarbonyl, 6-(methylenoxy)hexylaminocarbonyl,
- 7-(methylenoxy)heptylaminocarbonyl, 8-(methylenoxy)octylaminocarbonyl,
- 9-(methylenoxy)nonylaminocarbonyl, 10-(methylenoxy)decylaminocarbonyl,
- 11-(methylenoxy)undecylaminocarbonyl, 12-(methylenoxy)dodecylaminocarbonyl,
- 2-(methylenoxy)ethanoylamino, 3-(methylenoxy)propanoylamino,
- 4-(methylenoxy)butanoylamino, 5-(methylenoxy)pentanoylamino,
- 6-(methylenoxy)hexanoylamino, 7-(methylenoxy)heptanoylamino,
- 8-(methylenoxy)octanoylamino, 9-(methylenoxy)nonanoylamino,
- 10-(methylenoxy)decanoylamino, 11-(methylenoxy)undecanoylamino, 12-
- (methylenoxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoyloxy, 3-(carbonyloxy)propyloxy,
- 3-(carbonyloxy)propyloxycarbonyl, 4-(carbonyloxy)butyloxy, 4-(carbonyloxy)butyloxycarbonyl,
- 3-(carbonyloxy)propanoyloxy, 5-(carbonyloxy)pentyloxy, 5-(carbonyloxy)pentyloxycarbonyl,
- 4-(carbonyloxy)butanoyloxy, 6-(carbonyloxy)hexyloxy, 6-(carbonyloxy)hexyloxycarbonyl,
- 5-(carbonyloxy)pentanoyloxy, 7-(carbonyloxy)heptyloxy, 7-(carbonyloxy)heptyloxycarbonyl,
- 6-(carbonyloxy)hexanoyloxy, 8-(carbonyloxy)octyloxy, 8-(carbonyloxy)octyloxycarbonyl,
- 7-(carbonyloxy)heptanoyloxy, 9-(carbonyloxy)nonyloxy, 9-(carbonyloxy)nonyloxycarbonyl,
- 8-(carbonyloxy)octanoyloxy, 10-(carbonyloxy)decyloxy, 10-(carbonyloxy)decyloxycarbonyl,
- 9-(carbonyloxy)nonanoyloxy, 11-(carbonyloxy)undecyloxy,
- 11-(carbonyloxy)undecyloxycarbonyl, 10-(carbonyloxy)decanoyloxy,
- 12-(carbonyloxy)dodecyloxy, 12-(carbonyloxy)dodecyloxycarbonyl,
- 11-(carbonyloxy)undecanoyloxy, 3-(carbonyloxy)propylaminocarbonyl,
- 4-(carbonyloxy)butylaminocarbonyl, 5-(carbonyloxy)pentylaminocarbonyl,
- 6-(carbonyloxy)hexylaminocarbonyl, 7-(carbonyloxy)heptylaminocarbonyl,

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8-(carbonyloxy)octylaminocarbonyl, 9-(carbonyloxy)nonylaminocarbonyl,

10-(carbonyloxy)decylaminocarbonyl, 11-(carbonyloxy)undecylaminocarbonyl,

12-(carbonyloxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoylamino,

3-(carbonyloxy)propanoylamino, 4-(carbonyloxy)butanoylamino,

5-(carbonyloxy)pentanoylamino, 6-(carbonyloxy)hexanoylamino,

7-(carbonyloxy)heptanoylamino, 8-(carbonyloxy)octanoylamino,

9-(carbonyloxy)nonanoylamino, 10-(carbonyloxy)decanoylamino,

11-(carbonyloxy)undecanoylamino, 12-(carbonyloxy)dodecylaminocarbonyl

6-(3-propyleneaminocarbonyloxy)hexylene, 6-(3-propyleneoxy)hexylene,

6-(3-propyleneoxy)hexyloxy, 6-(3-propyleneaminocarbonyloxy)hexyloxy,

6-(3-propyleneaminocarbonyl)hexyl, 6-(3-propyleneaminocarbonyl)hexyloxy,

2-(1-methyleneoxy)ethyloxycarbonyloxy, 3-(1-methyleneoxy)propyloxycarbonyloxy,

6-(1-methyleneoxy)hexyloxycarbonyloxy, 2-(1-methyleneoxycarbonyl)ethylene,

3-(1-methyleneoxycarbonyl)propyloxycarbonyloxy,

6-(1-methyleneoxycarbonyl)hexyloxycarbonyloxy, 6-(3-propyleneoxycarbonyloxy)hexylene,

6-(3-propyleneoxycarbonyl)hexylene, 2-(1-methyleneaminocarbonyl)ethylene,

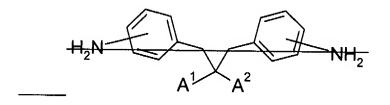
3-(1-methyleneaminocarbonyl)propylene, 6-(1-methyleneaminocarbonyl)hexylene, and

6-(3-propyleneaminocarbonyloxy)hexylene, 6-(3-propyleneaminocarbonyl)hexylene.

12. (previously presented): Diamine compounds according to claim 3, wherein Z<sup>1</sup> and Z<sup>2</sup> are selected from a single covalent bond, a spacer unit such as a straight-chain or branched alkylene group, which is unsubstituted, mono or poly-substituted by fluoro atoms, having 1 to 8 carbon atoms, and a spacer unit which is a straight-chain or branched alkylene group, which is unsubstituted, mono or poly-substituted by fluoro atoms, having 1 to 8 carbon atoms, wherein

one or more non-adjacent -CH<sub>2</sub>- groups is independently replaced by a group selected from -O-, -CO-, -CO-O-, -O-CO-, -NR¹-CO-, -CO-NR¹-, -CH=CH-, -C≡C-, and wherein R¹ represents a hydrogen atom or a straight chain or branched hydrocarbon radical having from 1 to 6 carbon atoms.

- 13. (previously presented): Diamine compounds according to claim 3, wherein Z¹ and Z² are selected from a single covalent bond, a spacer unit such a straight-chain or branched alkylene group having 1 to 4 carbon atom, and a spacer unit which is straight-chain or branched alkylene group having 1 to 4 carbon atoms, wherein one or two non-adjacent -CH₂- groups is independently replaced by a group selected from -O-, -CO-, -CO-O-, -O-CO-.
- 14. (previously presented): Diamine compounds according to claim 3, wherein n2 = 1 and n3 = 1.
- 15. (previously presented): Diamine compounds according to claim 3, wherein n1 = 0 with n2 = 1 and n3 = 1.
- 16. (previously presented): Diamine compounds according to claim 3, wherein D is an organic group having a steroid skeleton if n1+n2+n3=0.
- 17. (previously presented): Diamine compounds according to claim 3, wherein the steroid skeleton is a 3-cholesteryl or a 3-cholestaryl residue.
- 18. (currently amended): Diamine compounds according to claim 3, represented by the general formula I:



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wherein  $A^1$  and  $A^2$  each independently represent a photoreactive group which can be photoisomerized on exposure to UV or laser light.

- 19. (original): Diamine compounds according to claim 18, wherein the photoreactive groups are able to undergo photocyclization, in particular [2+2]-photocyclization.
- 20. (previously presented): Diamine compounds according to claim 18, wherein the photoreactive groups are sensitive to UV or laser light, in particular linearly polarized UV light.
- 21. (previously presented): Diamine compounds according to claim 18, wherein the photoreactive groups include cinnamates, benzylidenephthalimidines, benzylideneacetophones, diphenylacetylenes stilbazoles, uracyl, quinolinone, maleinimides, or cinnamylidene acetic acid derivatives.
- 22. (previously presented): Diamine compounds according to claim 18, wherein the photoreactive groups are represented by general formulae IIIa and IIIb:

$$-\cdots$$
  $S^2$   $E$   $V$   $F$ 

$$O$$
 $E$ 
 $G$ 
 $IIIb$ 

wherein

E represents pyrimidine-2,5-diyl, pyridine-2,5-diyl, 2,5-thiophenylene,
2,5-furanylene, 1,4- or 2,6-naphthylene, or phenylene, which is unsubstituted or

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mono- or poly-substituted by fluorine, chlorine, by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, or by a cyclic, straight-chain or branched alkyl residue which is unsubstituted mono- or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more non-adjacent -CH<sub>2</sub>- groups is independently be replaced by a group B as defined hereinabove;

F

represents –OR<sup>2</sup>, -NR<sup>3</sup>R<sup>4</sup> or an oxygen atom, which defines together with the ring E a coumarin unit, wherein R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are selected from hydrogen, a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, having 1 to 24 carbon atoms, a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, having 1 to 24 carbon atoms, wherein one or more non-adjacent -CH<sub>2</sub>- groups is independently replaced by a group J, or R<sup>3</sup> and R<sup>4</sup> together form a C<sub>5-8</sub> alicyclic ring; wherein

represents a group selected from -O-, -CO-, -CO-O-, -O-CO-, -NR¹-,
-NR¹-CO-, -CO-NR¹-, -NR¹-CO-O-, -O-CO-NR¹-, -NR¹-CO-NR¹-,
-CH=CH-, -C≡C-, -O-CO-O- and -Si(CH<sub>3</sub>)<sub>2</sub>-O-Si(CH<sub>3</sub>)<sub>2</sub>-, an aromatic or
an alicyclic group, and wherein R¹ represents a hydrogen atom or a
straight chain or branched hydrocarbon radical having from 1 to 6 carbon
atoms;

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G represents a hydrogen atom, or a halogen atom, a straight-chain or branched alkyl

group which is unsubstituted, mono or poly-substituted by cyano, fluorine,

chlorine, having 1 to 24 carbon atoms, or a straight-chain or branched alkyl group

which is unsubstituted, mono or poly-substituted by cyano, fluorine, chlorine,

having 1 to 24 carbon atoms, wherein one or more -CH<sub>2</sub>- groups is independently

replaced by a group J, with the proviso that oxygen atoms are not directly

attached to each other;

 $S^2$ ,  $S^3$  each independently of the other represent a single bond, a spacer unit which is a

straight-chain or branched alkylene group which is unsubstituted, mono or

polysubstituted by fluorine, chlorine, or cyano, having 1 to 40 carbon atoms, or a

spacer unit which is a straight-chain or branched alkylene group which is

unsubstituted, mono or poly-substituted by fluorine, chlorine, or cyano, having 1

to 40 carbon atoms, wherein one or more -CH2- groups is independently replaced

by a group J, with the proviso that oxygen atoms are not directly attached to each

other;

Q

X, Y

represents an oxygen atom or -NR1- wherein R1 represents a hydrogen atom or a

straight chain or branched hydrocarbon radical having from 1 to 6 carbon atoms;

each independently of the other represents hydrogen, fluorine, chlorine, cyano,

alkyl optionally substituted by fluorine having 1 to 12 carbon atoms in which

optionally one or more non-adjacent alkyl -CH2- groups are replaced by -O-,

-CO-O-, -O-CO- and/or -CH=CH-.

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23. (original): Diamine compounds according to claim 22, wherein E is selected from pyrimidine-2,5-diyl, pyridine-2,5-diyl, 2,5-thiophenylene, 2,5-furanylene, 1,4- or 2,6-naphthylene and phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine having 1 to 12 carbon atoms in which optionally one or more non-adjacent alkyl -CH<sub>2</sub>- groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C=C-.

- 24. (previously presented): Diamine compounds according to claim 22, wherein E is selected from 2,5-furanylene, 1,4- or 2,6-naphthylene and phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue having 1 to 12 carbon atoms in which optionally one or more non-adjacent alkyl -CH<sub>2</sub>- groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C≡C-.
- 25. (previously presented): Diamine compounds according to claim 22, wherein F is selected from -OR<sup>2</sup> and -NR<sup>3</sup>R<sup>4</sup>, wherein R<sup>2</sup> and R<sup>3</sup> represent a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, cyano, having 1 to 18 carbons atoms or a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly- substituted by fluorine, chlorine, cyano, having 1 to 18 carbons atoms, wherein one or more non-adjacent alkyl -CH<sub>2</sub>- groups is independently replaced by -O- or -CH=CH-, wherein R<sup>4</sup> is selected from a hydrogen atom, a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, cyano, having 1 to 18 carbons atoms or a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly- substituted by fluorine, chlorine, cyano, having 1 to 18 carbons atoms, wherein

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one or more non-adjacent - $CH_{2-}$  groups is independently replaced by -O- or -CH=CH-, or  $R^4$  and  $R^5$  together to form a  $C_{5-8}$  alicyclic ring.

- 26. (previously presented): Diamine compounds according to claim 22, wherein F is selected from the group comprising –OR<sup>2</sup> or –NHR<sup>3</sup>, wherein R<sup>2</sup> and R<sup>3</sup> represent a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine atoms, having 1 to 18 carbon atoms or a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly- substituted by fluorine atoms, having 1 to 18 carbon atoms, wherein one or more non-adjacent -CH<sub>2</sub>- groups is independently replaced by -O-.
- 27. (previously presented): Diamine compounds according to claim 22, wherein G is a hydrogen atom, or fluorine atom, or chlorine atom, a straight-chain or branched alkyl group which is unsubstituted, mono-substituted by cyano, fluorine or chlorine or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, or a straight-chain or branched alkyl group which is unsubstituted, mono-substituted by cyano, fluorine or chlorine or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more -CH<sub>2</sub>- groups is independently replaced -O-, -CO-, -CO-O-, -O-CO-, -NR<sup>1</sup>-, -NR<sup>1</sup>-CO-, -CO-NR<sup>1</sup>-, -NR<sup>1</sup>-CO-O-, -O-CO-NR<sup>1</sup>-, -NR<sup>1</sup>-CO-O-, an aromatic or an alicyclic group, with the proviso that oxygen atoms are not directly attached to each other, and wherein R<sup>1</sup> represents a hydrogen atom or a straight chain or branched hydrocarbon radical having from 1 to 6 carbon atoms.
- 28. (previously presented): Diamine compounds according to claim 22, wherein G is a hydrogen atom, a straight-chain or branched alkyl group having 1 to 18 carbon atoms, or a straight-chain or branched alkyl group having 1 to 18 carbon atoms, wherein one or more non-

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adjacent -CH<sub>2</sub>- groups is independently replaced -O-, -CO-, -CO-O-, -O-CO-, -NR<sup>1</sup>-, -NR<sup>1</sup>-CO-, -CO-NR<sup>1</sup>-, and -O-CO-O-, with the proviso that oxygen atoms are not directly attached to each other, and wherein R<sup>1</sup> represents a hydrogen atom or a straight chain or branched hydrocarbon radical having from 1 to 6 carbon atoms.

- 29. (previously presented): Diamine compounds according to claim 22, wherein S<sup>2</sup> is selected from a single covalent bond, -CO-O-, -CO-NR<sup>1</sup>-, -CO-, a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine, or cyano, having 1 to 24 carbon atoms, and a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine, or cyano, having 1 to 24 carbon atoms, wherein one or more -CH<sub>2</sub>- groups is independently replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other, wherein R<sup>1</sup> represents a hydrogen atom or a straight chain or branched hydrocarbon radical having from 1 to 6 carbon atoms.
- 30. (previously presented): Diamine compounds according to claim 22, wherein S<sup>2</sup> is selected from a single covalent bond, -CO-O-, -CO-, -(CH<sub>2</sub>)<sub>r</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-CO-, -(CH<sub>2</sub>)<sub>r</sub>-CO-O-, -(CH<sub>2</sub>)<sub>r</sub>-CO-O-, -(CH<sub>2</sub>)<sub>r</sub>-CO-NR<sup>1</sup>-, -CO-O-(CH<sub>2</sub>)<sub>r</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-NR<sup>1</sup>-CO-, -(CH<sub>2</sub>)<sub>r</sub>-NR<sup>1</sup>-, -CO-O-(CH<sub>2</sub>)<sub>r</sub>-, -CO-NR<sup>1</sup>-(CH<sub>2</sub>)<sub>r</sub>-O-, -CO-NR<sup>1</sup>-(CH<sub>2</sub>)<sub>r</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-O-(CH<sub>2</sub>)<sub>s</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-CO-O-(CH<sub>2</sub>)<sub>s</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-CO-O-(CH<sub>2</sub>)<sub>s</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-NR<sup>1</sup>-CO-O-(CH<sub>2</sub>)<sub>s</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-NR<sup>1</sup>-CO-O-(CH<sub>2</sub>)<sub>s</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-O-(CH<sub>2</sub>)<sub>s</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-O-CO-(CH<sub>2</sub>)<sub>s</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-O-CO-(CH<sub>2</sub>)<sub>s</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-O-CO-(CH<sub>2</sub>)<sub>s</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-O-CO-(CH<sub>2</sub>)<sub>s</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-O-(CH<sub>2</sub>)<sub>s</sub>-O-, -(CH<sub>2</sub>)<sub>r</sub>-O-(CH<sub>2</sub>)<sub>s</sub>-O-, -CO-O-(CH<sub>2</sub>)<sub>s</sub>-O-, -CO-O-(CH<sub>2</sub>)

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-CO-O-(CH<sub>2</sub>)<sub>r</sub>-O-(CH<sub>2</sub>)<sub>s</sub>-O-, wherein R<sup>1</sup> is as defined above, r and s each represent an integer from 1 to 20, and  $r+s \le 21$ .

- 31. (previously presented): Diamine compounds according to claim 22, wherein S² is selected from a single covalent bond,  $-(CH_2)_{r^-}$ ,  $-(CH_2)_{r^-}$ O-,  $-(CH_2)_{r^-}$ CO-O-,  $-(CH_2)_{r^-}$ O-CO-,  $-(CH_2)_{r^-}$ NH-CO-,  $-(CH_2)_{r^-}$ NH-CO-,  $-(CH_2)_{r^-}$ ,  $-(CO-NH-(CH_2)_{r^-}$ ,  $-(CO-NH-(CH_2)_{r^-}$ )  $-(CH_2)_{r^-}$ NH-CO-(CH<sub>2</sub>)<sub>s</sub>-,  $-(CH_2)_{r^-}$ NH-CO-O-(CH<sub>2</sub>)<sub>s</sub>-,  $-(CH_2)_{r^-}$ NH-CO-O-(CH<sub>2</sub>)<sub>s</sub>-O-,  $-(CH_2)_{r^-}$ NH-CO-(CH<sub>2</sub>)<sub>s</sub>-O-,  $-(CH_2)_{r^-}$ NH-CO-O-(CH<sub>2</sub>)<sub>s</sub>-O-, wherein r and s each represent an integer from 1 to 12 and r + s  $\leq$  15.
- 32. (previously presented): Diamine compounds according to claim 22, wherein S² include 1,2-ethylen, 1,3-propylen, 1,4-butylen, 1,5-pentylen, 1,6-hexylen, 1,7-heptylen, 1,8-octylen, 1,9-nonylen, 1,10-decylen, 1,11-undecylen, 1,12-dodecylen, 3-methyl-1,4-butylen, 2-(methylenoxy)ethylen, 3-(methylenoxy)propylen, 4-(methylenoxy)butylen, 5-(methylenoxy)pentylen, 6-(methylenoxy)hexylen, 7-(methylenoxy)heptylen, 8-(methylenoxy)octylen, 9-(methylenoxy)nonylen, 10-(methylenoxy)decylen, 11-(methylenoxy)undecylen, 12-(methylenoxy)dodecylen, 2-(carbonyloxy)ethylen, 3-(carbonyloxy)propylen, 4-(carbonyloxy)butylen, 5-(carbonyloxy)pentylen, 6-(carbonyloxy)nonylen, 10-(carbonyloxy)decylen, 11-(carbonyloxy)undecylen, 12-(carbonyloxy)dodecylen, 2-(carbonylamino)ethylen, 3-(carbonylamino)propylen, 4-(carbonylamino)butylen, 5-(carbonylamino)ethylen, 6-(carbonylamino)hexylen, 7-(carbonylamino)heptylen, 8-(carbonylamino)octylen, 9-(carbonylamino)nonylen, 7-(carbonylamino)heptylen, 8-(carbonylamino)octylen, 9-(carbonylamino)nonylen,

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10-(carbonylamino)decylen, 11-(carbonylamino)undecylen, 12-(carbonylamino)dodecylen,

3-propylenoxy, 3-propylenoxycarbonyl, 2-ethylenoyloxy, 4-butylenoxy, 4-butylenoxycarbonyl,

3-propylenoyloxy, 5-pentylenoxy, 5-pentylenoxycarbonyl, 4-butylenoyloxy, 6-hexylenoxy,

6-hexylenoxycarbonyl, 5-pentylenoyloxy, 7-heptylenoxycarbonyl,

6-hexylenoyloxy, 8-octylenoxy, 8-octylenoxycarbonyl, 7-heptylenoyloxy, 9-nonylenoxy,

9-nonylenoxycarbonyl, 8-octylenoyloxy, 10-decylenoxy, 10-decylenoxycarbonyl,

9-nonylenoyloxy, 11-undecylenoxy, 11-undecylenoxycarbonyl, 10-decylenoyloxy,

12-dodecylenoxy, 12-dodecylenoxycarbonyl, 11-undecylenoyloxy, 3-propylenaminocarbonyl,

4-butylenaminocarbonyl, 5-pentylenaminocarbonyl, 6-hexylenaminocarbonyl,

7-heptylenaminocarbonyl, 8-octylenaminocarbonyl, 9-nonylenaminocarbonyl,

10-decylenaminocarbonyl, 11-undecylenaminocarbonyl, 12-dodecylenaminocarbonyl,

2-ethylenoylamino, 3-propylenoylamino, 4-butylenoylamino, 5-pentylenoylamino,

6-hexylenoylamino, 7-heptylenoylamino, 8-octylenoylamino, 9-nonylenoylamino,

 $10\hbox{-}decylenoylamino, 11\hbox{-}undecylenoylamino, 2\hbox{-}(methylenoxy) ethanoyloxy\ ,}$ 

3-(methylenoxy)propyloxy, 3-(methylenoxy)propyloxycarbonyl, 4-(methylenoxy)butyloxy,

4-(methylenoxy)butyloxycarbonyl, 3-(methylenoxy)propanoyloxy, 5-(methylenoxy)pentyloxy,

5-(methylenoxy)pentyloxycarbonyl, 4-(methylenoxy)butanoyloxy, 6-(methylenoxy)hexyloxy,

6-(methylenoxy)hexyloxycarbonyl, 5-(methylenoxy)pentanoyloxy, 7-(methylenoxy)heptyloxy,

7-(methylenoxy)heptyloxycarbonyl, 6-(methylenoxy)hexanoyloxy, 8-(methylenoxy)octyloxy,

8-(methylenoxy)octyloxycarbonyl, 7-(methylenoxy)heptanoyloxy, 9-(methylenoxy)nonyloxy,

9-(methylenoxy)nonyloxycarbonyl, 8-(methylenoxy)octanoyloxy, 10-(methylenoxy)decyloxy,

10-(methylenoxy)decyloxycarbonyl, 9-(methylenoxy)nonanoyloxy,

11-(methylenoxy)undecyloxy, 11-(methylenoxy)undecyloxycarbonyl,

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- 10-(methylenoxy)decanoyloxy, 12-(methylenoxy)dodecyloxy,
- 12-(methylenoxy)dodecyloxycarbonyl, 11-(methylenoxy)undecanoyloxy,
- 3-(methylenoxy)propylaminocarbonyl, 4-(methylenoxy)butylaminocarbonyl,
- 5-(methylenoxy)pentylaminocarbonyl, 6-(methylenoxy)hexylaminocarbonyl,
- 7-(methylenoxy)heptylaminocarbonyl, 8-(methylenoxy)octylaminocarbonyl,
- 9-(methylenoxy)nonylaminocarbonyl, 10-(methylenoxy)decylaminocarbonyl,
- 11-(methylenoxy)undecylaminocarbonyl, 12-(methylenoxy)dodecylaminocarbonyl,
- 2-(methylenoxy)ethanoylamino, 3-(methylenoxy)propanoylamino,
- 4-(methylenoxy)butanoylamino, 5-(methylenoxy)pentanoylamino,
- 6-(methylenoxy)hexanoylamino, 7-(methylenoxy)heptanoylamino,
- 8-(methylenoxy)octanoylamino, 9-(methylenoxy)nonanoylamino,
- 10-(methylenoxy)decanoylamino, 11-(methylenoxy)undecanoylamino, 12-
- (methylenoxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoyloxy, 3-(carbonyloxy)propyloxy,
- 3-(carbonyloxy)propyloxycarbonyl, 4-(carbonyloxy)butyloxy, 4-(carbonyloxy)butyloxycarbonyl,
- 3-(carbonyloxy)propanoyloxy, 5-(carbonyloxy)pentyloxy, 5-(carbonyloxy)pentyloxycarbonyl,
- 4-(carbonyloxy)butanoyloxy, 6-(carbonyloxy)hexyloxy, 6-(carbonyloxy)hexyloxycarbonyl,
- 5-(carbonyloxy)pentanoyloxy, 7-(carbonyloxy)heptyloxy, 7-(carbonyloxy)heptyloxycarbonyl,
- 6-(carbonyloxy)hexanoyloxy, 8-(carbonyloxy)octyloxy, 8-(carbonyloxy)octyloxycarbonyl,
- 7-(carbonyloxy)heptanoyloxy, 9-(carbonyloxy)nonyloxy, 9-(carbonyloxy)nonyloxycarbonyl,
- 8-(carbonyloxy)octanoyloxy, 10-(carbonyloxy)decyloxy, 10-(carbonyloxy)decyloxycarbonyl,
- 9-(carbonyloxy)nonanoyloxy, 11-(carbonyloxy)undecyloxy,
- 11-(carbonyloxy)undecyloxycarbonyl, 10-(carbonyloxy)decanoyloxy,
- 12-(carbonyloxy)dodecyloxy, 12-(carbonyloxy)dodecyloxycarbonyl,

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- 11-(carbonyloxy)undecanoyloxy, 3-(carbonyloxy)propylaminocarbonyl,
- 4-(carbonyloxy)butylaminocarbonyl, 5-(carbonyloxy)pentylaminocarbonyl,
- 6-(carbonyloxy)hexylaminocarbonyl, 7-(carbonyloxy)heptylaminocarbonyl,
- 8-(carbonyloxy)octylaminocarbonyl, 9-(carbonyloxy)nonylaminocarbonyl,
- 10-(carbonyloxy)decylaminocarbonyl, 11-(carbonyloxy)undecylaminocarbonyl,
- 12-(carbonyloxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoylamino,
- 3-(carbonyloxy)propanoylamino, 4-(carbonyloxy)butanoylamino,
- 5-(carbonyloxy)pentanoylamino, 6-(carbonyloxy)hexanoylamino,
- 7-(carbonyloxy)heptanoylamino, 8-(carbonyloxy)octanoylamino,
- 9-(carbonyloxy)nonanoylamino, 10-(carbonyloxy)decanoylamino,
- 11-(carbonyloxy)undecanoylamino, 12-(carbonyloxy)dodecylaminocarbonyl,
- 6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenoxy)hexylen,
- 6-(3-propylenoxy)hexyloxy, 6-(3-propylenaminocarbonyloxy)hexyloxy,
- 6-(3-propylenaminocarbonyl)hexyl, 6-(3-propylenaminocarbonyl)hexyloxy,
- 2-(methylenoxy)ethyloxycarbonyloxy, 3-(methylenoxy)propyloxycarbonyloxy,
- 6-(methylenoxy)hexyloxycarbonyloxy, 2-(methylenoxycarbonyl)ethylen,
- 3-(methylenoxycarbonyl)propyloxycarbonyloxy,
- 6-(methylenoxycarbonyl)hexyloxycarbonyloxy, 6-(3-propylenoxycarbonyloxy)hexylen,
- 6-(3-propylenoxycarbonyl)hexylen, 2-(methylenaminocarbonyl)ethylen,
- 3-(methylenaminocarbonyl)propylen, 6-(methylenaminocarbonyl)hexylen,
- 6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenaminocarbonyl)hexylen,
- 4-{[6-(methylenoxy)hexyl]oxy}phenylen, 4-[6-(methylenoxy)hexyl]cyclohexylen,
- 3-methoxy-4-{[6-(methylenoxy)hexyl]oxy}phenylen,

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4-{[6-(methylenoxy)hexyl]oxy}phenylcarbonyloxy,

4-[6-(methylenoxy)hexyl]cyclohexanoyloxy,

3-ethoxy-4-{[8-(methylenoxy)octyl]oxy}phenylcarbonyloxy,

4-[3-(carbonyloxy)propyl]phenylen, 4-[6-(carbonyloxy)hexyl]phenylen,

4-[6-(carbonyloxy)hexyl]cyclohexylen, 3-methoxy-4-[6-(carbonyloxy)hexyl]phenylen,

4-[6-(carbonyloxy)hexyl]phenylcarbonyloxy, 4-[6-(carbonyloxy)hexyl]cyclohexanoyloxy,

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3-ethoxy-4-[8-(carbonyloxy)octyl]phenylcarbonyloxy,

 $2-\{4-4-\{2-(methylenoxy)ethyl\}cyclohexyl]phenyl\}ethoxy,\ 1-[4'-\{[4-(methylenoxy)butyl]oxy\}-[4'-4]ethoxy,\ 1-[4'-4]ethoxy,\ 1$ 

1,1'biphenyl-4-yl]carbonyloxy, 1-{4-[4-{2-(methylenoxy)ethoxy}phenyl}methyloxy,

2-{4-[4-(2-carbonyloxyethyl) cyclohexyl]phenyl}ethoxy, 2-[4'-(4-

 $carbonyloxybutyl)-1,1'biphenylen-4-yl] ethoxy, 6-\{4-[4-(2-carbonyloxyethyl)phenyl\}hexyloxy, and 5-\{[4'-[4-(methylenoxy)butoxy)]-1,1'-biphenyl-4-yl]oxy\}pentanoyloxy.$ 

- 33. (previously presented): Diamine compounds according to claim 22, wherein S<sup>3</sup> is selected from -CO-O-, -CO-NR<sup>1</sup>-, -CO-, a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine, or cyano, having 1 to 24 carbon atoms, and a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine, or cyano, having 1 to 24 carbon atoms, wherein one or more -CH<sub>2</sub>- groups is independently replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other, wherein R<sup>1</sup> represents a hydrogen atom or a straight chain or branched hydrocarbon radical having from 1 to 6 carbon atoms.
- 34. (previously presented): Diamine compounds according to claim 22, wherein S<sup>3</sup> is selected from a single covalent bond,  $-(CH_2)_{r^-}$ ,  $-CO-(CH_2)_{r^-}$ ,  $-CO-(CH_2)_{r^-}$

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-(CH<sub>2</sub>)<sub>r</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-O-(CH<sub>2</sub>)<sub>s</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-CO-O-(CH<sub>2</sub>)<sub>s</sub>-, -(CH<sub>2</sub>)<sub>r</sub>-O-CO-(CH<sub>2</sub>)<sub>s</sub>-,  $-(CH<sub>2</sub>)_r-NR<sup>1</sup>-CO-(CH<sub>2</sub>)_s-, -(CH<sub>2</sub>)_r-NR<sup>1</sup>-CO-O-(CH<sub>2</sub>)_s-, \text{ and -CO-O-(CH<sub>2</sub>)}_r-O-(CH<sub>2</sub>)_s-,$  wherein  $R^1$  is as defined herein above; r and r each represent an integer from 1 to 20; and r+s  $\leq 21$ .

35. (previously presented): Diamine compounds according to claim 22, wherein S<sup>3</sup> include 1,2-ethylen, 1,3-propylen, 1,4-butylen, 1,5-pentylen, 1,6-hexylen, 1,7-heptylen, 1,8-octylen, 1,9-nonylen, 1,10-decylen, 1,11-undecylen, 1,12-dodecylen, 3-methyl-1,4-butylen, 2-(methylenoxy)ethylen, 3-(methylenoxy)propylen, 4-(methylenoxy)butylen, 5-(methylenoxy)pentylen, 6-(methylenoxy)hexylen, 7-(methylenoxy)heptylen, 8-(methylenoxy)octylen, 9-(methylenoxy)nonylen, 10-(methylenoxy)decylen, 11-(methylenoxy)undecylen, 12-(methylenoxy)dodecylen, 2-(carbonyloxy)ethylen, 3-(carbonyloxy)propylen, 4-(carbonyloxy)butylen, 5-(carbonyloxy)pentylen, 6-(carbonyloxy)hexylen, 7-(carbonyloxy)heptylen, 8-(carbonyloxy)octylen, 9-(carbonyloxy)nonylen, 10-(carbonyloxy)decylen, 11-(carbonyloxy)undecylen, 12-(carbonyloxy)dodecylen, 2-(carbonylamino)ethylen, 3-(carbonylamino)propylen, 4-(carbonylamino)butylen, 5-(carbonylamino)pentylen, 6-(carbonylamino)hexylen, 7-(carbonylamino)heptylen, 8-(carbonylamino)octylen, 9-(carbonylamino)nonylen, 10-(carbonylamino)decylen, 11-(carbonylamino)undecylen, 12-(carbonylamino)dodecylen, 6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenoxy)hexylen, 6-(3-propylenaminocarbonyl)hexyl, 2-(methylenoxycarbonyl)ethylen, 6-(3-propylenoxycarbonyloxy)hexylen, 6-(3-propylenoxycarbonyl)hexylen, 2-(methylenaminocarbonyl)ethylen, 3-(methylenaminocarbonyl)propylen,

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6-(methylenaminocarbonyl)hexylen, 6-(3-propylenaminocarbonyloxy)hexylen,

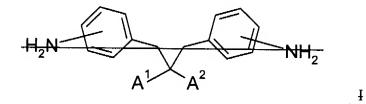
6-(3-propylenaminocarbonyl)hexylen, 4-{[6-(methylenoxy)hexyl]oxy}phenylen,

4-[6-(methylenoxy)hexyl]cyclohexylen, 3-methoxy-4-{[6-(methylenoxy)hexyl]oxy}phenylen,

4-[3-(carbonyloxy)propyl]phenylen, 4-[6-(carbonyloxy)hexyl]phenylen, and

4-[6-(carbonyloxy)hexyl]cyclohexylen, 3-methoxy- 4-[6-(carbonyloxy)hexyl]phenylen.

- 36. (previously presented): Diamine compounds according to claim 22, wherein Q is an oxygen atom or -NH-.
- 37. (previously presented): Diamine compounds according to claim 22, wherein Q is an oxygen atom.
- 38. (previously presented): Diamine compounds according to claim 22, wherein X and Y represent hydrogen.
- 39. (previously presented): Diamine compounds according to claim 22, wherein the photoactive groups are groups of formula IIIa.
- 40. (previously presented): Method of using a diamine compound according to claim 22, comprising providing the diamine compound as precursor for the production of liquid crystal alignment layers.
- 41. (currently amended): A liquid crystal orientation material obtained by the reaction of a diamine compound according to claim 3-of-general formula I:



wherein

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## A<sup>1</sup> represents an organic group of 1-to 40 carbon atoms;

A<sup>2</sup>—represents a hydrogen atom or an organic group of 1 to 40 carbon atoms.

- 42. (canceled).
- 43. (canceled).
- 44. (canceled).
- 45. (canceled).
- 46. (canceled).
- 47. (canceled).
- 48. (canceled).
- 49. (canceled).
- 50. (canceled).
- 51. (canceled).
- 52. (canceled).
- 53. (canceled).
- 54. (canceled).
- 55. (canceled).
- 56. (canceled).
- 57. (canceled).
- 58. (canceled).
- 59. (canceled).
- 60. (canceled).
- 61. (canceled).
- 62. (canceled).

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- 63. (canceled).
- 64. (canceled).
- 65. (canceled).
- 66. (canceled).
- 67. (canceled).